

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

Claims 1-16 (Canceled)

17. (Previously Presented) An inflation circuit comprising a compressed fluid source, a compressed fluid supply line connected to the source, a non-return valve interposed in the supply line between a reception chamber and the fluid source, a branch connected to the supply line between the non-return valve and the source, a calibrated leak device communicable with the supply line in order to form a calibrated leak of compressed fluid from the supply line, wherein the reception chamber is defined by a wheel intended to be equipped with a tire, and further comprising an adjustable choke disposed in the wheel between the non-return valve and the compressed fluid reception chamber of the wheel.

18. (Canceled)

19. (Previously Presented) The circuit according to claim 17, wherein the non-return valve is springless and includes a differential valve.

20. (Previously Presented) The circuit according to claim 19, wherein the differential valve is mounted in a hub of the wheel along a rotary axis of the wheel.

21. (Currently Amended) The circuit according to claim 19, wherein the free differential valve comprises a hollow ferrule surmounted by a cap and a stopper floating in an inner space of the cap at the top of the ferrule.

22. (Currently Amended) The circuit according to claim 17, wherein the non-return valve comprises a circular cylindrical plate with a first diametric perforation communicating with a second perforation intersecting a circular face of the plate, ~~the~~ a differential valve being mounted opposite to the second perforation.

23. (Previously Presented) The circuit according to claim 17, wherein the non-return valve comprises a circular cylindrical plate equipped with a circular groove formed in its peripheral face and two toric joints bordering this groove.

24. (Previously Presented) The circuit according to claim 17, further comprising an actuated slide valve (EVGF) for isolating the fluid source from the calibrated leak.

25. (Previously Presented) The circuit according to claim 17, further comprising a slide valve (EVDG) interposed between the calibrated leak and the supply line.

26. (Previously Presented) The circuit according to claim 17, further comprising a pressure or output measuring device (CP1) connected to the supply line.

27. (Previously Presented) The circuit according to claim 17, further comprising an adjustment circuit for controlling the calibrated leak device from a signal issued by a pressure or output measuring device.

28. (Previously Presented) The circuit according to claim 17, further comprising on the supply line a plurality of branches mounted between respective non-return valves (VA, VB, VC, VD) of plural reception chambers and the fluid source, and a set (EVA, EVB, EVC, EVD) of slide valves mounted on respective distribution lines connected to the branches.

29. (Previously Presented) The circuit according to claim 28, wherein the non-return valves can be controlled independently of one another.

30. (Previously Presented) The circuit according to claim 17, wherein the leak is calibrated to permit total deflation of the chamber in more than 50 seconds.

Claims 31-48 (Canceled)

49. (New) The circuit according to claim 19, wherein the differential valve includes a floating stopper.